Cross Platform Desktop Applications: Using Node, Electron, And NW Js

Publisher's Note: Microsoft ceased support for .NET Core 3.0 in March 2020. A new edition of this book is available that uses .NET 6 (an LTS release with support up until November 2024), C# 10, and Visual Studio 2022, as well as Visual Studio Code. Key FeaturesBuild modern, cross-platform applications with .NET Core 3.0Get up to speed with C#, and up to date with all the latest features of C# 8.0Start creating professional web applications with ASP.NET Core 3.0Book Description In C# 8.0 and .NET Core 3.0 – Modern Cross-Platform Development, Fourth Edition, expert teacher Mark J. Price gives you everything you need to start programming C# applications. This latest edition uses the popular Visual Studio Code editor to work across all major operating systems. It is fully updated and expanded with new chapters on Content Management Systems (CMS) and machine learning with ML.NET. The book covers all the topics you need. Part 1 teaches the fundamentals of C#, including object-oriented programming, and new C# 8.0 features such as nullable reference types, simplified switch pattern matching, and default interface methods. Part 2 covers the .NET Standard APIs, such as managing and querying data, monitoring and improving performance, working with the filesystem, async streams, serialization, and encryption. Part 3 provides examples of cross-platform applications you can build and deploy, such as web apps using ASP.NET Core or mobile apps using Xamarin.Forms. The book introduces three technologies for building Windows desktop applications including Windows Forms, Windows Presentation Foundation (WPF), and Universal Windows Platform (UWP) apps, as well as web applications, web services, and mobile apps. What you will learnBuild cross-platform applications for Windows, macOS, Linux, iOS, and AndroidExplore application development with C# 8.0 and .NET Core 3.0Explore ASP.NET Core 3.0 and create professional web applicationsLearn object-oriented programming and C# multitaskingQuery and manipulate data using LINQUse Entity Framework Core and work with relational databasesDiscover Windows app development using the Universal Windows Platform and XAMLBuild mobile applications for iOS and Android using Xamarin.FormsWho this book is for Readers with some prior programming experience or with a science, technology, engineering, or mathematics (STEM) background, who want to gain a solid foundation with C# 8.0 and .NET Core 3.0.

A beginner's guide to building Windows applications with WinUI for UWP and desktop applications Key FeaturesCreate modern Windows 10 applications and gain access to UI controls that were previously limited to UWP applicationsDiscover how to modernize your existing Win32 apps with a modern Windows 10 UILearn to embed a single page application (SPA) in a WinUI application with a web framework like BlazorBook Description WinUI 3.0 takes a whole new approach to delivering Windows UI components and controls, and is able to deliver the same features on more than one version of Windows 10. Learn WinUI 3.0 is a comprehensive introduction to WinUI and Windows apps for anyone who is new to WinUI, Universal Windows Platform (UWP), and XAML applications. The book begins by helping you get to grips with the latest features in WinUI and shows you how XAML is used in UI development. You'll then set up a new Visual Studio environment and learn how to create a new UWP project. Next, you'll find out how to incorporate the Model-View-ViewModel (MVVM) pattern in a WinUI project and develop unit tests for ViewModel commands. Moving on, you'll cover the Windows Template Studio (WTS) new project wizard and WinUI libraries in a step-by-step way. As you advance, you'll discover how to leverage the Fluent Design system to create beautiful WinUI applications. You'll also explore the contents and capabilities of the Windows Community Toolkit and learn to create a new UWP user control. Toward the end, the book will teach you how to build, debug, unit test, deploy, and monitor apps in production. By the end of this book, you'll have learned how to build WinUI applications from scratch and modernize existing WPF and WinForms applications using WinUI controls. What you will learnGet up and running with WinUI and discover how it fits into the landscape of Project Reunion and Windows UI developmentBuild new Windows apps quickly with robust templatesDevelop testable and maintainable apps using the MVVM patternModernize WPF and WinForms applications with WinUI and XAML IslandsDiscover how to build apps that can target Windows and leverage the power of the webInstall the XAML Controls Gallery sample app and explore available WinUI controlsWho this book is for This book is for anyone who wants to develop Windows applications with a modern user experience (UX). If you are familiar with UWP and WPF and are looking to enhance your knowledge of Windows development and modernize existing apps, you will find this book useful. Hands-on experience with C# and .NET is expected but no prior knowledge of WinUI is required.

Essential Cell Biology provides a readily accessible introduction to the central concepts of cell biology, and its lively, clear writing and exceptional illustrations make it the ideal textbook for a first course in both cell and molecular biology. The text and figures are easy-to-follow, accurate, clear, and engaging for the introductory student. Molecular detail has been kept to a minimum in order to provide the reader with a cohesive conceptual framework for the basic science that underlies our current understanding of all of biology, including the biomedical sciences. The Fourth Edition has been thoroughly revised, and covers the latest developments in this fast-moving field, yet retains the academic level and length of the previous edition. The book is accompanied by a rich package of online student and instructor resources, including over 130 narrated movies, an expanded and updated Question Bank. Essential Cell Biology, Fourth Edition is additionally supported by the Garland Science Learning System. This homework platform is designed to evaluate and improve student performance and allows instructors to select assignments on specific topics and review the performance of the entire class, as well as individual students, via the instructor dashboard. Students receive immediate feedback on their mastery of the topics, and will be better prepared for lectures and classroom discussions. The user-friendly system provides a convenient way to engage students while assessing progress. Performance data can be used to tailor classroom discussion, activities, and lectures to address students' needs precisely and efficiently. For more information and sample material, visit http://garlandscience.rocketmix.com/.

Learn the fundamentals of QT 5 framework to develop interactive cross-platform applications Key Features A practical guide on the fundamentals of application development with QT 5 Learn to write scalable, robust and adaptable C++ code with QT Deploy your application on different platforms such as Windows, Mac OS, and Linux Book Description Qt is a mature and powerful framework for delivering sophisticated applications across a multitude of platforms. It has a rich history in the Linux world, is widely used in embedded devices, and has made great strides in the Mobile arena over the past few years. However, in the Microsoft Windows and Apple Mac OS X worlds, the dominance of C#/.NET and Objective-C/Cocoa means that Qt is often overlooked. This book demonstrates the power and flexibility of the Qt framework for desktop application development and shows how you can write your application once and deploy it to multiple operating systems. Build a complete real-world line of business (LOB) solution from scratch, with distinct C++ library, QML user interface, and QtTest-driven unit-test projects. This is a suite of essential techniques that cover the core requirements for most LOB applications and will empower you to progress from a blank page to shipped application. What you will learn · Install and configure the Qt Framework and Qt Creator IDE · Create a new multi-project solution from scratch and control every aspect of it with QMake · Implement a rich user interface with QML · Learn the fundamentals of QtTest and how to integrate unit testing · Build self-aware data entities that can serialize themselves to and from JSON · Manage data persistence with SQLite and CRUD operations · Reach out to the internet and consume an RSS feed · Produce application packages for distribution to other users Who this book is for This book is for application developers who want a powerful and flexible framework to create modern, responsive applications on Microsoft Windows, Apple Mac OS X, and Linux desktop platforms. You should be comfortable with C++ but no prior knowledge of Qt or QML is required.

Fearless Cross-Platform Development with Delphi
Build over 9 cross-platform desktop applications from scratch
Building Cross-Platform GUI Applications with Fyne
Building Hybrid Android Apps with Java and JavaScript
Electron in Action
Learn to Build Cross Platform Desktop Applications using Github's Electron
Developing Cross Platform Mobile Applications in the Cloud

Learn the complete Qt ecosystem and its tools and build UIs for mobile and desktop applications Key FeaturesUnleash the power of the latest Qt 5.9 with C++14Easily compile, run, and debug your applications from the powerful Qt Creator IDEBuild multi-platform projects that target Android, iOS, Windows, MacOS, Linux, and moreBook Description Qt 5.9 is an application development framework that provides a great user experience and develops full-capability applications with Qt Widgets, QML, and even Qt 3D. This learning path demonstrates the power and flexibility of the Qt framework for desktop application development and shows how you can write an application once and deploy it to multiple operating systems. It will address all the challenges while developing cross-platform applications with the Qt framework. This course will give you a better understanding of the Qt framework and tools to resolve serious issues such as linking, debugging, and multithreading. It will also upskill you by explaining how to create a to-do-style app and taking you through all the stages in building a successful project. You will build a suite of apps; while developing these apps, you'll deepen your knowledge of Qt Quick's layout systems, and see Qt 3D and widgets in action. The next project will be in the industrial and agricultural sectors: making sense of sensor data via a monitoring system. Your apps should run seamlessly across devices and operating systems such as Android, iOS, Windows, or Mac, and be cost-effective by integrating with existing web technologies. You take the role of lead developer and prototype a monitoring system. In doing so, you'll get to know Qt's Bluetooth and HTTP APIs, as well as the Charts and Web Engine UI modules. These projects will help you gain a holistic view of the Qt framework. What you will learnInstall and configure the Qt Framework and Qt Creator IDEImplement a rich user interface with QMLLearn the fundamentals of QtTest and how to integrate unit testingCreate stunning UIs with Qt Widget and Qt QuickDevelop powerful, cross-platform applications with the Qt frameworkDesign GUIs with Qt Designer and build a library in it for UI previewsBuild a desktop UI with widgets and DesignerGet familiar with multimedia components to handle visual input and outputWho this book is for This book will appeal to developers and programmers who would like to build GUI-based applications. Knowledge of C++ is necessary and a basic familiarity with Qt would be helpful.

This book offers an engaging approach to cross-platform mobile app development using the Lua scripting language and Corona SDK as a foundation. Beginning programmers will learn the fundamental concepts and techniques one step at a time across 14 hands-on chapters illustrated with over 100 sample apps. If you've dreamt of having an app for sale, but don't know how to start, this book can be the first step on your journey. Scripters who prefer a GUI-based development environment can use the bundled Drawn2Code IDE to design their Corona SDK apps. This prototype IDE automates much of the writing process for you, allowing you to focus on the design of your app.Professor Carlson has taught over a thousand students to code and create mobile apps using a fun, step-by-step approach. Focus on learning scripting fundamentals while building cross-platform games and utility apps with the rich feature-set afforded by the Corona SDK.

Learn to rapidly build and deploy cross-platform applications from a single codebase with practical, real-world solutions using the mature Delphi 10.4 programming environment Key FeaturesImplement Delphi's modern features to build professional-grade Windows, web, mobile, and IoT applications and powerful serversBecome a Delphi code and project guru by learning best practices and techniques for cross-platform developmentDeploy your complete end-to-end application suite anywhereBook Description Delphi is a strongly typed, event-driven programming language with a rich ecosystem of frameworks and support tools. It comes with an extensive set of web and database libraries for rapid application development on desktop, mobile, and internet-enabled devices. This book will help you keep up with the latest IDE features and provide a sound foundation of project management and recent language enhancements to take your productivity to the next level. You'll discover how simple it is to support popular mobile device features such as sensors, cameras, and GPS. The book will help you feel comfortable working with FireMonkey and styles and incorporating 3D user interfaces in new ways. As you advance, you'll be able to build cross-platform solutions that not only look native but also take advantage of a wide array of device capabilities. You'll also learn how to use embedded databases, such as SQLite and InterBase ToGo, synchronizing them with your own custom backend servers or modules using the powerful RAD Server engine. The book concludes by sharing tips for testing and deploying your end-to-end application suite for a smooth user experience. By the end of this book, you'll be able to deliver modern enterprise applications using Delphi confidently. What you will learnDiscover the latest enhancements in the Delphi IDEOvercome the barriers that hold you back from embracing cross-platform developmentBecome fluent with FireMonkey controls, styles, LiveBindings, and 3D objectsBuild Delphi packages to extend RAD Server or modularize your applicationsUse FireDAC to get quick and direct access to any dataLeverage IoT technologies such as Bluetooth and Beacons and learn how to put your app on a Raspberry PiEnable remote apps with backend servers on Windows and Linux through REST APIsDevelop modules for IIS and Apache web serversWho this book is for This book is for Delphi developers interested in expanding their skillset beyond Windows programming by creating professional-grade applications on multiple platforms, including Windows, Mac, iOS, Android, and back-office servers. You'll also find this book useful if you're a developer looking to upgrade your knowledge of Delphi to keep up with the latest changes and enhancements in this powerful toolset. Some Delphi programming experience is necessary to make the most out of this book.

JavaScript is the little scripting language that could. Once used chiefly to add interactivity to web browser windows, JavaScript is now a primary building block of powerful and robust applications. In this practical book, new and experienced JavaScript developers will learn how to use this language to create APIs as well as web, mobile, and desktop applications. Author and engineering leader Adam D. Scott covers technologies such as Node.js, GraphQL, React, React Native, and Electron. Ideal for developers who want to build full stack applications and ambitious web development beginners looking to bootstrap a startup, this book shows you how to create a single CRUD-style application that will work across several platforms. Explore GraphQL's simple process for querying data Learn about shared authentication for APIs, web apps, and native applications Build performant web applications with React and Styled Components Use React Native to write cross-platform applications for iOS and Android that compile to native code Learn how to write desktop applications with Electron

Cross-platform Desktop Application Development: Electron, Node, NW.js, and React
Learn Qt 5
Programming Flutter
Xamarin 4.x Cross-Platform Application Development
Build intelligent apps, websites, and services with Blazor, ASP.NET Core, and Entity Framework Core using Visual Studio Code
Cross-Platform Development with Qt 6 and Modern C++
Build apps, websites, and services with ASP.NET Core 6, Blazor, and EF Core 6 using Visual Studio 2022 and Visual Studio Code

Learn how to develop cross-platform desktop app from scratch with Electron and NodeAbout This Book * Build a solid foundation with Electron for an easier development experience* Use modern JavaScript frameworks and tools along with Electron to take your desktop applications to the next level* Extend the functionality of Electron through modulesWho This Book Is ForIf you are a developer with prior experience of building front-end applications and you are keen on developing a cross-platform desktop application, then this book is for you. This book is also ideal for experienced JavaScript developers with a basic understanding of front-end development and Node.js development.What You Will Learn * Explore various tools and libraries to build and debug an Electron application* Use popular JavaScript frameworks such as Angular and Typescript along with Electron to enhance your app* Work with the desktop UI development for Electron using Photon* Find out how to use various Electron APIs like Clipboard, Process, Shell, Image, File, Session, and Cookie* Integrate your application into different desktop environments with Electron API* Cache your network resources using service worker* Test the Electron application using Mocha and Spectron* See how to package and distribute an Electron applicationIn Detail Though web applications are becoming increasingly popular, desktop apps are still important. The Electron framework lets you write cross-platform desktop applications using JavaScript, HTML, and CSS, and this book will teach you how to create your first desktop application with Electron. It will guide you on how to build desktop applications that run on Windows, Mac, and Linux platforms.You will begin your journey with an overview of Electron, and then move on to explore the various stages of creating a simple social media application. Along the way, you will learn how to use advanced Electron APIs, debug an Electron application, and make performance improvements using the Chrome developer tools. You'll also find out how to package and distribute an application, and more.By the end of the book, you will be able to build a complete desktop application using Electron and web technologies. You will have a solid understanding of the common challenges that desktop app developers face, and you'll know how to solve them.Style and approachCovers everything you need to know about Electron with full examples and explanations to get you building desktop apps with Electron as quickly as possible.

Cross-Platform Development in C++ is the definitive guide to developing portable C/C++ application code that will run natively on Windows, Macintosh, and Linux/Unix platforms without compromising functionality, usability, or quality. Long-time Mozilla and Netscape developer Syd Logan systematically addresses all the technical and management challenges associated with software portability from planning and design through coding, testing, and deployment. Drawing on his extensive experience with cross-platform development, Logan thoroughly covers issues ranging from the use of native APIs to the latest strategies for portable GUI development. Along the way, he demonstrates how to achieve feature parity while avoiding the problems inherent to traditional cross-platform development approaches. This book will be an indispensable resource for every software professional and technical manager who is building new cross-platform software, porting existing C/C++ software, or planning software that may someday require cross-platform support. Build Cross-Platform Applications without Compromise Throughout the book, Logan illuminates his techniques with realistic scenarios and extensive, downloadable code examples, including a complete cross-platform GUI toolkit based on Mozilla ' s XUL that you can download, modify, and learn from. Coverage includes Policies and procedures used by Netscape, enabling them to ship Web browsers to millions of users on Windows, Mac OS, and Linux Delivering functionality and interfaces that are consistent on all platforms Understanding key similarities and differences among leading platform-specific GUI APIs, including Win32/.NET, Cocoa, and Gtk+ Determining when and when not to use native IDEs and how to limit their impact on portability Leveraging standards-based APIs, including POSIX and STL Avoiding hidden portability pitfalls associated with floating point, char types, data serialization, and types in C++ Utilizing platform abstraction libraries such as the Netscape Portable Runtime (NSPR) Establishing an effective cross-platform bug reporting and tracking system Creating builds for multiple platforms and detecting build failures across platforms when they occur Understanding the native runtime environment and its impact on installation Utilizing wxWidgets to create multi-platform GUI applications from a single code base Thoroughly testing application portability Understanding cross-platform GUI toolkit design with Trixul

Building desktop applications doesn't have to be difficult. Using Python & Qt5 you can create fully functional desktop apps in minutes. This is the 4th Edition of Create GUI Applications, updated for 2020 & PySide2 Starting from the very basics, this book takes you on a tour of the key features of PySide you can use to build real-life applications. Learn the fundamental building blocks of PySide applications — Widgets, Layouts & Signals and learn how PySide uses the event loop to handle and respond to user input. Design beautiful UIs with Qt Designer and customize the look and feel of your applications with Qt Style Sheets and custom widgets. Use Qt's MVC-like ModelViews framework to connect data sources to your widgets, including SQL databases, numpy and pandas data tables, to build-data driven application. Visualize data using matplotlib & PyQtGraph and connect with external data sources to build live dashboards. Learn how to use threads and processes to manage long-running tasks and communicate with external services. Parse data and visualize the output in logs and progress bars. The book includes usability and architectural tips to help you build maintainable and usable PySide2 applications from the start. Finally, once your application is ready to be released, discover how to package it up into professional-quality installers, ready to ship. The book includes - 665 pages of hands-on PySide2 exercises - 211 code examples to experiment with - Includes 4 example apps - Compatible with Python 3.4+ - Code free to reuse in your own projects

Build HTML5-based hybrid applications for Android with a mix of native Java and JavaScript components, without using third-party libraries and wrappers such as PhoneGap or Titanium. This concise, hands-on book takes you through the entire process, from setting up your development environment to deploying your product to an app store. Learn how to create apps that have access to native APIs, such as location, vibrator, sensors, and the camera, using a JavaScript/Java bridge—and choose the language that gives you better performance for each task. If you have experience with HTML5 and JavaScript, you ' ll quickly discover why hybrid app development is the wave of the future. Set up a development environment with HTML, CSS, and JavaScript tools Create your first hybrid Android project, using Eclipse IDE Use the WebView control to host your hybrid application Explore hybrid application architecture, including JavaScript/Java communication Build single-page applications, using JavaScript libraries such as Backbone and Underscore Get optimization tips and useful snippets for CSS, DOM, and JavaScript Distribute your application to Google Play and the Amazon Appstore

ICISA 2018
Electron from Scratch
Develop cross-platform applications with modern UIs using the powerful Qt framework
C# 8.0 and .NET Core 3.0 – Modern Cross-Platform Development
Build apps with C# and XAML that run on Windows, macOS, iOS, Android, and WebAssembly

Electron Projects

PhoneGap is a standards-based, open-source development framework that can be deployed to any mobile device without losing the features of the native app—allowing for access to device contacts, the local file system, camera, and media on multiple platforms without requiring users to write a single line of code. Ideal for intermediate to advanced users, PhoneGap Build: Developing Cross Platform Mobile Applications in the Cloud offers the comprehensive coverage you need to harness the power of this dynamic tool. It provides complete coverage of the cloud computing platform and the theories behind cloud computing, using a series of engaging examples. The book explains the differences between existing mobile platforms, the different types of browsers they support, and the programming languages and integrated development environment required to develop apps for each of them. It then describes how PhoneGap makes the task of developing cross-platform mobile apps easier. This book will teach you how to use: HTML5, CSS3, and JavaScript to develop apps for devices across various mobile operating systems PhoneGap Build to develop mobile apps in the cloud PhoneGap with Sencha Touch and jQuery Mobile Back end databases to store and retrieve information The text starts with simpler applications and gradually moves toward describing advanced concepts and how to exploit different application programming interfaces and methods. By the time you finish the book, you will learn how to develop feature-rich mobile applications that can run on the cloud to support different platforms. Supplying authoritative guidance and proven best practices for designing cloud-based applications, the book is an ideal reference for cloud system developers, architects, and IT professionals. It is also suitable for use in instructional settings.

A project-based guide to help you create, package, and deploy desktop applications on multiple platforms using modern JavaScript frameworks Key Features Use your web development skills with JavaScript and Node.js to build desktop applications for macOS and Windows Develop desktop versions of popular mobile applications that are similar to Slack, Spotify, and more Design desktop apps with automatic updates and real-time analytics capabilities Book Description The Electron framework allows you to use modern web technologies to build applications that share the same code across all operating systems and platforms. This also helps designers to easily transition from the web to the desktop. Electron Projects guides you through building cross-platform Electron apps with modern web technologies and JavaScript frameworks such as Angular, React.js, and Vue.js. You'll explore the process of configuring modern JavaScript frameworks and UI libraries, real-time analytics and automatic updates, and interactions with the operating system. You'll get hands-on with building a basic Electron app, before moving on to implement a Markdown Editor. In addition to this, you'll be able to experiment with major JavaScript frameworks such as Angular and Vue.js, discovering ways to integrate them with Electron apps for building cross-platform desktop apps. Later, you'll learn to build a screenshot snipping tool, a mini-game, and a music player, while also gaining insights into analytics, bug tracking, and licensing. You'll then get to grips with building a chat app, an eBook generator and finally a simple digital wallet app. By the end of this book, you'll have experience in building a variety of projects and project templates that will help you to apply your knowledge when creating your own cross-platform applications. What you will learn Initialize Node.js, Node Package Manager (NPM), and JavaScript to set up your app Integrate Phaser with Electron to build a simple 2D game Improve app quality by adding an error tracking system and crash reports Implement group chat features and event handling capabilities using Firebase Integrate a WordPress-like rich-text editor into your app Build Electron applications using a single codebase Who this book is for This book is for JavaScript developers who want to explore the Electron framework for building desktop apps. Working knowledge of modern frontend JavaScript frameworks and Node.js is assumed. No prior knowledge of desktop development is required.

Work in Flutter, a framework designed from the ground up for dual platform development, with support for native Java/Kotlin or Objective-C/Swift methods from Flutter apps. Write your next app in one language and build it for both Android and iOS. Deliver the native look, feel, and performance you and your users expect from an app written with each platform's own tools and languages. Deliver apps fast, doing half the work you were doing before and exploiting powerful new features to speed up development. Write once, run anywhere. Learn Flutter, Google's multi-platform mobile development framework. Instantly view the changes you make to an app with stateful hot reload and define a declarative UI in the same language as the app logic, without having to use separate XML UI files. You can also reuse existing platform-specific Android and iOS code and interact with it in an efficient and simple way. Use built-in UI elements - or build your own - to create a simple calculator app. Run native Java/Kotlin or Objective-C/Swift methods from your Flutter apps, and use a Flutter package to make HTTP requests to a Web API or to perform read and write operations on local storage. Apply visual effects to widgets, create transitions and animations, create a chat app using Firebase, and deploy everything on both platforms. Get native look and feel and performance in your Android and iOS apps, and the ability to build for both platforms from a single code base. What You Need: Flutter can be used for Android development on any Linux, Windows or macOS computer, but macOS is needed for iOS development.

This book contains selected papers from the 9th International Conference on Information Science and Applications (ICISA 2018) and provides a snapshot of the latest issues encountered in technical convergence and convergences of security technology. It explores how information science is core to most current research, industrial and commercial activities and consists of contributions covering topics including Ubiquitous Computing, Networks and Information Systems, Multimedia and Visualization, Middleware and Operating Systems, Security and Privacy, Data Mining and Artificial Intelligence, Software Engineering, and Web Technology. The proceedings introduce the most recent information technology and ideas, applications and problems related to technology convergence, illustrated through case studies, and reviews converging existing security techniques. Through this volume, readers will gain an understanding of the current state-of-the-art information strategies and technologies of convergence security. The intended readership includes researchers in academia, industry and other research institutes focusing on information science and technology.

Create GUI Applications with Python & Qt5 (PySide2 Edition)
Information Science and Applications 2018
Applying Native Device APIs
Desktop Apps with JavaScript
Pragmatic Flutter
Cross-Platform Development in C++
Building Cross-Platform Applications with GraphQL, React, React Native, and Electron

Publisher's Note: Microsoft will stop supporting .NET 5 in early May 2022. A new edition of this book is available that uses .NET 6 (an LTS release with support up until November 2024), C# 10, and Visual Studio 2022, as well as Visual Studio Code. Key Features • Explore the newest additions to C# 9, the .NET 5 class library, Entity Framework Core and Blazor • Strengthen your command of ASP.NET Core 5.0 and create professional websites and services • Build cross-platform apps for Windows, macOS, Linux, iOS, and Android Book Description In C# 9 and .NET 5 – Modern Cross-Platform Development, Fifth Edition, expert teacher Mark J. Price gives you everything you need to start programming C# applications. This latest edition uses the popular Visual Studio Code editor to work across all major operating systems. It is fully updated and expanded with a new chapter on the Microsoft Blazor framework. The book's first part teaches the fundamentals of C#, including object-oriented programming and new C# 9 features such as top-level programs, target-typed new object instantiation, and immutable types using the record keyword. Part 2 covers the .NET APIs, for performing tasks like managing and querying data, monitoring and improving performance, and working with the file system, async streams, serialization, and encryption. Part 3 provides examples of cross-platform apps you can build and deploy, such as websites and services using ASP.NET Core or mobile apps using Xamarin.Forms. The best type of application for learning the C# language constructs and many of the .NET libraries is one that does not distract with unnecessary application code. For that reason, the C# and .NET topics covered in Chapters 1 to 13 feature console applications. In Chapters 14 to 20, having mastered the basics of the language and libraries, you will build practical applications using ASP.NET Core, Model-View-Controller (MVC), and Blazor. By the end of the book, you will have acquired the understanding and skills you need to use C# 9 and .NET 5 to create websites, services, and mobile apps. What you will learn • Build your own types with object-oriented programming • Query and manipulate data using LINQ • Build websites and services using ASP.NET Core 5 • Create intelligent apps using machine learning • Use Entity Framework Core and work with relational databases • Discover Windows app development using the Universal Windows Platform and XAML • Build rich web experiences using the Blazor framework • Build mobile applications for iOS and Android using Xamarin.Forms Who this book is for This book is best for C# and .NET beginners, or programmers who have worked with C# in the past but feel left behind by the changes in the past few years. This book doesn't expect you to have any C# or .NET experience; however, you should have a general understanding of programming. Students and professionals with a science, technology, engineering, or mathematics (STEM) background can certainly benefit from this book. Table of Contents • Hello, C#! Welcome, .NET Core! • Speaking C# • Controlling Flow and Converting Types • Writing, Debugging, and Testing Functions • Building Your Own Types with Object-Oriented Programming • Implementing Interfaces and Inheriting Classes • Understanding and Packaging .NET Types • Working with Common .NET Types • Working with Files, Streams, and Serialization (N.B. Please use the Look Inside option to see further chapters) Review "Mark Price's extraordinary book covers every aspect of C# 9 and .NET 5. It is filled with step-by-step demonstrations and will be of tremendous value both to those who want to learn C# and to more experienced C# programmers making the transition to C# 9. Highly recommended!" -- Jesse Liberty - author of Programming C# and Learning C# (O'Reilly Media)

Understand how to use the Fyne toolkit to build exciting apps for a range of devices and deploy them effectively Key FeaturesLearn how to use standard widgets, dialogs, and layouts as well as how to build your ownUnderstand how to develop an app and package and distribute it to different operating systems and app storesExplore the design principles and vision of the Fyne toolkit and how that may align with your projectBook Description The history of graphical application development is long and complicated, with various development challenges that persist to this day. The mix of technologies involved and the need to use different programming languages led to a very steep learning curve for developers looking to build applications across multiple platforms. In Building Cross-Platform GUI Applications with Fyne, you'll understand how the Go language, when paired with a modern graphical toolkit such as Fyne, can overcome these issues and make application development much easier. To provide an easy-to-use framework for cross-platform app development, the Fyne project offers many graphical concepts and design principles that are outlined throughout this book. By working through five example projects, you'll learn how to build apps effectively, focusing on each of the main areas, including the canvas, layouts, file handling, widgets, data binding, and themes. The book will also show you how the completed applications can then be run on your desktop computer, laptop, and smartphone. After completing these projects, you will discover how to prepare applications for release and distribute them to platform marketplaces and app stores. By the end of this book, you'll be able to create cross-platform graphical applications with visually appealing user interfaces and concise code. What you will learnBecome well-versed with the history of GUI development and how Fyne and the Golang programming language make it easierExplore how the Fyne toolkit is architected and the various modules are providedDiscover how Fyne apps can be tested and constructed using best practicesConstruct five complete applications and deploy them to your devicesCustomize the design of your apps by extending widgets and themesUnderstand the separation and presentation of data and how to test and build applications that present dynamic dataWho this book is for This Fyne-Golang GUI book is for developers from any background who are looking to build cross-platform applications with a modern toolkit. It will also be useful for Go developers who are looking to explore graphical apps and GUI developers looking for a new toolkit for cross-platform development. Basic knowledge of Graphical User Interface (GUI) development is assumed (although a brief history is also included in the book). The book also features a short introduction to the Go language as a quick refresher.

This second Preview Edition ebook, now with 16 chapters, is about writing applications for Xamarin.Forms, the new mobile development platform for iOS, Android, and Windows phones unveiled by Xamarin in May 2014. Xamarin.Forms lets you write shared user-interface code in C# and XAML that maps to native controls on these three platforms.

This book exposes innovative technics for developing native macOS desktop applications by using C# and the .NET Core 3.1. You will discover that the implementation of a macOS native application can be done with other tools than the classical tools proposed by Apple: SwiftUI, Objective-C ··· Before reserved to C++ programmers, the macOS application arena is now open to the C# developer's community. What you will learn in this book? - Essentials macOS commands (for rookie macOS user). - Essentials C# coding technics (for rookie C# developer). - Setup an efficient and professional development environment for .NET Core 3.1 on your Mac. - Review a panel of technical solutions for the GUI implementation. - Choose the adapted UI for your application specific needs. - Code your desktop application (boilerplates furnished). - Produce macOS executable from your C# project. - Package and distribute your application for the macOS ecosystem. Who is it for? - macOS C++, Java or Swift developers. - ASP.NET C# developers. - Windows C# developers. Accelerate your project start. This book includes project templates (boilerplates) useful for starting quickly and easily the coding of your macOS desktop application. This book avoids you a long and tedious phase of research for finding the most relevant technical solution for your app. Thus, you can focus on the functional features of the application rather than the technical constraints of the Mac OS X system.

Building Cross-Platform Desktop Applications with Electron
Hands-On GUI Application Development in Go
JavaScript Everywhere
Native, Cross-Platform Apps the Easy Way
Create beautiful, platform-agnostic graphical applications using Fyne and the Go programming language
A Beginner's Guide Using the Corona SDK
The hands-on guide to making apps with Python

Explore Qt Creator, Qt Quick, and QML to design and develop applications that work on desktop, mobile, embedded, and IoT platforms Key FeaturesBuild a solid foundation in Qt by learning about its core classes, multithreading, File I/O, and networkingLearn GUI programming and build custom interfaces using Qt Widgets, Qt Designer, and QMLUse the latest features of C++17 for improving the performance of your Qt applicationsBook Description Qt is a powerful development framework that serves as a complete toolset for building cross-platform applications, helping you reduce development time and improve productivity. Completely revised and updated to cover C++17 and the latest developments in Qt 5.12, this comprehensive guide is the third edition of Application Development with Qt Creator. You'll start by designing a user interface using Qt Designer and learn how to instantiate custom messages, forms, and dialogues. You'll then understand Qt's support for multithreading, a key tool for making applications responsive, and the use of Qt's Model-View-Controller (MVC) to display data and content. As you advance, you'll learn to draw images on screen using Graphics View Framework and create custom widgets that interoperate with Qt Widgets. This Qt programming book takes you through Qt Creator's latest features, such as Qt Quick Controls 2, enhanced CMake support, a new graphical editor for SCXML, and a model editor. You'll even work with multimedia and sensors using Qt Quick, and finally develop applications for mobile, IoT, and embedded devices using Qt Creator. By the end of this Qt book, you'll be able to create your own cross-platform applications from scratch using Qt Creator and the C++ programming language. What you will learnCreate programs from scratch using the Qt framework and C++ languageCompile and debug your Qt Quick and C++ applications using Qt CreatorImplement map view with your Qt application and display device location on the mapUnderstand how to call Android and iOS native functions from Qt C++ codeLocalize your application with Qt LinguistExplore various Qt Quick components that provide access to audio and video playbacksDevelop GUI applications using both Qt and Qt QuickWho this book is for If you are a beginner looking to harness the power of Qt and the Qt Creator framework for cross-platform development, this book is for you. Although no prior knowledge of Qt and Qt Creator is required, basic knowledge of C++ programming is assumed.

Create compelling cross-platform desktop apps with a few lines of JavaScript, HTML, and CSS code with Electron.

A comprehensive guide for beginners to learn the key concepts, real-world applications, and latest features of C# 10 and .NET 6 with hands-on exercises using Visual Studio 2022 and Visual Studio Code Key FeaturesExplore the newest additions to C# 10, the .NET 6 class library, and Entity Framework Core 6Create professional websites and services with ASP.NET Core 6 and BlazorBuild cross-platform apps for Windows, macOS, Linux, iOS, and AndroidBook Description Extensively revised to accommodate all the latest features that come with C# 10 and .NET 6, this latest edition of our comprehensive guide will get you coding in C# with confidence. You'll learn object-oriented programming, writing, testing, and debugging functions, implementing interfaces, and inheriting classes. The book covers the .NET APIs for performing tasks like managing and querying data, monitoring and improving performance, and working with the filesystem, async streams, and serialization. You'll build and deploy cross-platform apps, such as websites and services using ASP.NET Core. Instead of distracting you with unnecessary application code, the first twelve chapters will teach you about C# language constructs and many of the .NET libraries through simple console applications. In later chapters, having mastered the basics, you'll then build practical applications and services using ASP.NET Core, the Model-View-Controller (MVC) pattern, and Blazor. What you will learnBuild rich web experiences using Blazor, Razor Pages, the Model-View-Controller (MVC) pattern, and other features of ASP.NET CoreBuild your own types with object-oriented programmingWrite, test, and debug functionsQuery and manipulate data using LINQIntegrate and update databases in your apps using Entity Framework Core, Microsoft SQL Server, and SQLiteBuild and consume powerful services using the latest technologies, including gRPC and GraphQLBuild cross-platform apps using XAMLWho this book is for Designed for both beginners and C# and .NET programmers who have worked with C# in the past and want to catch up with the changes made in the past few years, this book doesn't need you to have any C# or .NET experience. However, you should have a general understanding of programming before you jump in.

Cross-Platform Desktop ApplicationsUsing Node, Electron, and NW.jsSimon and Schuster
Cross-Platform Mobile Application Development
Cross-Platform GUI Programming with wxWidgets
Build responsive, cross-platform, graphical applications with the Go programming language
Building Mac OS X, Linux, and Windows Applications (Adobe Reader)
Expand your Delphi skills to build a new generation of Windows, web, mobile, and IoT applications
Electron: Building Cross Platform Desktop Apps
C# 7 and .NET Core: Modern Cross-Platform Development

Discover Golang's GUI libraries such as Go-GTK (GIMP Toolkit) and Go-Qt and build beautiful, performant, and responsive graphical applications Key FeaturesConceptualize and build state-of-art GUI applications with Golang (Go)Tackle the complexity of varying GUI application sizes with a structured and scalable approachGet hands-on experience of GUI development with Shiny, and labs/ui, Fyne, and WalkBook Description Go is often compared to C++ when it comes to low-level programming and implementations that require faster processing, such as Graphical User Interfaces (GUIs). In fact, many claim that Go is superior to C++ in terms of its concurrency and ease of use. Most graphical application toolkits, though, are still written using C or C++, and so they don't enjoy the benefits of using a modern programming language such as Go. This guide to programming GUIs with Go 1.11 explores the various toolkits available, including UI, Walk, Shiny, and Fyne. The book compares the vision behind each project to help you pick the right approach for your project. Each framework is described in detail, outlining how you can build performant applications that users will love. To aid you further in creating applications using these emerging technologies, you'll be able to easily refer to code samples and screenshots featured in the book. In addition to toolkit-specific discussions, you'll cover more complex topics, such as how to structure growing graphical applications, and how cross-platform applications can integrate with each desktop operating system to create a seamless user experience. By delving into techniques and best practices for organizing and scaling Go-based graphical applications, you'll also glimpse Go's impressive concurrency system. In the concluding chapters, you'll discover how to distribute to the main desktop marketplaces and distribution channels. By the end of this book, you'll be a confident GUI developer who can use the Go language to boost the performance of your applications. What you will learnUnderstand the benefits and complexities of building native graphical applications Gain insights into how Go makes cross-platform graphical application development simple Build platform-native GUI applications using andlabs/ui Develop graphical Windows applications using Walk Create multiplatform GUI applications using Shiny, Nuklear, and Fyne Use Go wrappers for GTK and Qt for GUI application development Streamline your requirements to pick the correct toolkit strategyWho this book is for This book is designed for Go developers who are interested in building native graphical applications for desktop computers and beyond. Some knowledge of building applications using Go is useful, but not essential. Experience in developing GUIs is not required as the book explores the benefits and challenges they pose. This book will also be beneficial for GUI application developers who are interested in trying Go.

Electron is currently the most popular framework and runtime for creating cross-platform desktop applications with web technologies. Maintained by GitHub, Electron combines Chromium's rendering library with Node.js and C++ to power apps such as Slack and Visual Studio Code. This short, hands-on guide introduces each aspect of developing and distributing your own apps with this framework. Author Felix Rieseberg, a staff engineer at Slack, begins by explaining how Electron's modules and APIs generally work. You'll then learn how to build an app from ground up and how to integrate it with your operating system for a native user experience. Learn Electron's fundamental patterns and most commonly used modules and APIs Build flexible user interfaces that can display windows in any size, shape, or opacity Understand the process for shipping an Electron app: packaging, creating installers, and enabling automatic updates Explore core considerations for developing apps with Electron: performance, community support, and framework shortcomings

Build an awesome production-ready cross-platform desktop application using Electron and React.js About This Video Use the core functionalities of the latest Electron 5.0 to develop a doctor appointments application Integrate React with Electron to create cross-platform user interfaces Utilize the APIs to increase the efficiency and performance of your applications In Detail Are you building an application across multiple OS like Windows, macOS, and Linux? Electron framework allows you to build user interfaces for all the platforms at the same time. This course is designed to help you integrate Electron with React and create advanced UI. In this course, you will learn everything you need to know about Electron. You will start by setting up your environment and create the basic layouts to render the application window using HTML windows and IPC. All the concepts will be implemented in a real-world application to give you a build-as-you-learn experience. Utilize the Electron APIs to build your application functionalities. Finally, integrate Electron with React to create powerful user interfaces. You will also learn to deploy your application for both Windows and iOS systems. By the end of the course, you will have the skills to build powerful desktop apps with GUIs that wow your clients using Electron.js.

Create 3 useful desktop applications with web technologies using Electron About This Video Gain proficiency in building desktop applications with Electron Understand how to use Vanilla JS and React with Electron Create custom menu items, system tray apps, and more In Detail Be ready to get hands-on in this interactive project-based course designed to help you build and package cross-platform desktop applications using Electron. If you didn't already know, many popular apps such as VS Code, Slack, and Skype are built on Electron! Throughout this course, you'll be building 3 apps - ImageShrink - An app to optimize images for websites SystTop - A real-time CPU monitor with notifications and system tray BugLogger - A CRUD app to track logs, which uses React and the MongoDB Atlas cloud database In the first section of this course, you will start with an introduction to Electron and how it works. As you progress, you will start creating your first app- ImageShrink. You will also learn how to create menus with custom items. The next section will take you through the steps to create the interface, log files, and IPC communication. In addition to this, you will go on to build a menu template. In later sections, you'll get up to speed with working through 2 more applications, SystTop and BugLogger. The course will also help you focus on how to work with Interval/Dynamic System Stats. By the end of this course, you will be able to build desktop apps with Electron and even establish communication between processes with IPCMain and IPCRenderer.

Leverage the power of WinUI, the future of native Windows application development
Introducing Electron
Build modern, responsive cross-platform desktop applications with Qt, C++, and QML
Cross-Platform Desktop Applications
Build Desktop Applications with JavaScript
Essential Cell Biology
Electron: From Beginner to Pro

Develop powerful cross-platform applications with Xamarin About This Book Write native cross-platform applications with Xamarin Design user interfaces that can be shared across Android, iOS, and Windows Phone using Xamarin.Forms Practical cross-platform development strategies Who This Book Is For If you are a developer with experience in C# and are just getting into mobile development, this is the book for you. This book will give you a head start with cross-platform development and will be the most useful to developers who have experience with desktop applications or the web. What You Will Learn Apple's MVC design pattern The Android activity lifecycle Share C# code across platforms and call native Objective-C or Java libraries from C# Create a real web service back end in Windows Azure using SQL Azure as database storage Set up third-party libraries such as NuGet and Objective Sharpie in many different ways, and port a desktop .NET library to Xamarin Use Xamarin.Mobile for camera, contacts, and location In Detail Xamarin is a leading cross-platform application development tool used by top companies such as Coca-Cola, Honeywell, and Alaska Airlines to build apps. Version 4 features significant updates to the platform including the release of Xamarin.Forms 2.0 and improvements have been made to the iOS and Android designers. Xamarin was acquired by Microsoft so it is now a part of the Visual Studio family. This book will show you how to build applications for iOS, Android, and Windows. You will be walked through the process of creating an application that comes complete with a back-end web service and native features such as GPS location, camera, push notifications, and other core features. Additionally, you'll learn how to use external libraries with Xamarin and Xamarin.Forms to create user interfaces. This book also provides instructions for Visual Studio and Windows. This edition has been updated with new screenshots and detailed steps to provide you with a holistic overview of the new features in Xamarin 4. Style and approach This book offers a tutorial style approach to teach you the skills required to develop end-to-end cross-platform solutions with Xamarin.

Discover how to take your existing web development skills and learn how to create desktop applications for macOS, Windows, and Linux, using GitHub's Electron. Learn how to combine the power of Node.js and Chromium to provide a powerful development platform for creating web applications that break free from the browser. Electron: From Beginner to Pro guides you through the capabilities that

you have available to create desktop applications. Learn to use features like file system access, create native menus, OS-specific dialogs and more. The authors will show you how to package your application for distribution for multiple platforms and enable auto-updating. What You Will Learn Leverage your knowledge of HTML, CSS and JavaScript Use current web applications for the desktop Create and use Electron ' s main process and render process to create effective desktop applications Communicate between processes and between windows Build desktop applications that can be updated and distributed Who This Book Is For Web developers looking to leverage their HTML, CSS and JavaScript skills to create desktop widgets and applications. Developers wanting to leverage existing a Web application to extend functionality with a desktop application.

Summary Electron in Action guides you, step-by-step, as you learn to build cross-platform desktop applications that run on Windows, OSX, and Linux. By the end of the book, you'll be ready to build simple, snappy applications using JavaScript, Node, and the Electron framework. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Wouldn't it be great to build desktop applications using just your web dev skills? Electron is a framework designed for exactly that! Fully cross-platform, Electron lets you use JavaScript and Node to create simple, snappy desktop apps. Spinning up tools, games, and utilities with Electron is fast, practical, and fun! About the Book Electron in Action teaches you to build cross-platform applications using JavaScript, Node, and the Electron framework. You'll learn how to think like a desktop developer as you build a text tool that reads and renders Markdown. You'll add OS-specific features like the file system, menus, and clipboards, and use Chromium's tools to distribute the finished product. You'll even round off your learning with data storage, performance optimization, and testing. What's inside Building for macOS, Windows, and Linux Native operating system APIs Using third-party frameworks like React Deploying to the Mac App Store About the Reader Requires intermediate JavaScript and Node skills. No experience building desktop apps required. About the Author Steven Kinney is a principal engineer at SendGrid, an instructor with Frontend Masters, and the organizer of the DinosaurJS conference in Denver, Colorado. Table of Contents PART 1 - GETTING STARTED WITH ELECTRON Introducing Electron Your first Electron application PART 2 - BUILDING CROSS-PLATFORM APPLICATIONS WITH ELECTRON Building a notes application Using native file dialog boxes and facilitating interprocess communication Working with multiple windows Working with files Building application and context menus Further operating system integration and dynamically enabling menu items Introducing the tray module Building applications with the menubar library Using transpilers and frameworks Persisting use data and using native Node.js modules Testing applications with Spectron PART 3 - DEPLOYING ELECTRON APPLICATIONS Building applications for deployment Releasing and updating applications Distributing your application through the Mac App Store

Electron is an open-source framework for creating desktop applications with your favorite web technologies: JavaScript, HTML, and CSS. It makes it easy to create a simple app with a few lines of code, using languages you already know. Want to learn more? Join Ray Villalobos as he walks through the techniques you need to master cross-platform desktop development with Electron. Learn how to configure and communicate between app windows (web pages) via the main and renderer processes; use Vue.js-the progressive JavaScript framework-with Electron; and improve your apps by modifying components and adding modals. Plus, see how to finish up an app by customizing menus and adding an icon for your dock.

Learn to Build Cross Platform Desktop Applications Using Github's Electron

Application Development with Qt Creator

Developing native macOS GUI software with C#

C# 9 and .NET 5 – Modern Cross-Platform Development

Creating Mobile Apps with Xamarin.Forms Preview Edition 2

Design and build applications with modern graphical user interfaces without worrying about platform dependency

C# 10 and .NET 6 – Modern Cross-Platform Development

Enhance your cross-platform programming abilities with the powerful features and capabilities of Qt 6 Key FeaturesLeverage Qt and C++ capabilities to create modern, cross-platform applications that can run on a wide variety of software applicationsExplore what's new in Qt 6 and understand core concepts in depthBuild professional customized GUI applications with the help of Qt CreatorBook Description Qt is a cross-platform application development framework widely used for developing applications that can run on a wide range of hardware platforms with little to no change in the underlying codebase. If you have basic knowledge of C++ and want to build desktop or mobile applications with a modern graphical user interface (GUI), Qt is the right choice for you. Cross-Platform Development with Qt 6 and Modern C++ helps you understand why Qt is one of the favorite GUI frameworks adopted by industries worldwide, covering the essentials of programming GUI apps across a multitude of platforms using the standard C++17 and Qt 6 features. Starting with the fundamentals of the Qt framework, including the features offered by Qt Creator, this practical guide will show you how to create classic user interfaces using Qt Widgets and touch-friendly user interfaces using Qt Quick. As you advance, you'll explore the Qt Creator IDE for developing applications for multiple desktops as well as for embedded and mobile platforms. You will also learn advanced concepts about signals and slots. Finally, the book takes you through debugging and testing your app with Qt Creator IDE. By the end of this book, you'll be able to build cross-platform applications with a modern GUI along with the speed and power of native apps. What you will learnWrite cross-platform code using the Qt framework to create interactive applicationsBuild a desktop application using Qt WidgetsCreate a touch-friendly user interface with Qt QuickDevelop a mobile application using Qt and deploy it on different platformsGet to grips with Model/View programming with Qt Widgets and Qt QuickDiscover Qt's graphics framework and add animations to your user interfaceWrite test cases using the Qt Test framework and debug codeBuild a translation-aware applicationFollow best practices in Qt to write high-performance codeWho this book is for This book is for application developers who want to use C++ and Qt to create modern, responsive applications that can be deployed to multiple operating systems such as Microsoft Windows, Apple macOS, and Linux desktop platforms. Although no prior knowledge of Qt is expected, beginner-level knowledge of the C++ programming language and object-oriented programming system (OOPs) concepts will be helpful.

A project-based guide to help you create, package, and deploy desktop applications on multiple platforms using modern JavaScript frameworks Key FeaturesUse your web development skills with JavaScript and Node.js to build desktop applications for macOS and WindowsDevelop desktop versions of popular mobile applications that are similar to Slack, Spotify, and moreDesign desktop apps with automatic updates and real-time analytics capabilitiesBook Description The Electron framework allows you to use modern web technologies to build applications that share the same code across all operating systems and platforms. This also helps designers to easily transition from the web to the desktop. Electron Projects guides you through building cross-platform Electron apps with modern web technologies and JavaScript frameworks such as Angular, React.js, and Vue.js. You'll explore the process of configuring modern JavaScript frameworks and UI libraries, real-time analytics and automatic updates, and interactions with the operating system. You'll get hands-on with building a basic Electron app, before moving on to implement a Markdown Editor. In addition to this, you'll be able to experiment with major JavaScript frameworks such as Angular and Vue.js, discovering ways to integrate them with Electron apps for building cross-platform desktop apps. Later, you'll learn to build a screenshot snipping tool, a mini-game, and a music player, while also gaining insights into analytics, bug tracking, and licensing. You'll then get to grips with building a chat app, an eBook generator and finally a simple digital wallet app. By the end of this book, you'll have experience in building a variety of projects and project templates that will help you to apply your knowledge when creating your own cross-platform applications. What you will learnInitialize Node.js, Node Package Manager (NPM), and JavaScript to set up your appIntegrate Phaser with Electron to build a simple 2D gameImprove app quality by adding an error tracking system and crash reportsImplement group chat features and event handling capabilities using FirebaseIntegrate a WordPress-like rich-text editor into your appBuild Electron applications using a single codebaseWho this book is for This book is for JavaScript developers who want to explore the Electron framework for building desktop apps. Working knowledge of modern frontend JavaScript frameworks and Node.js is assumed. No prior knowledge of desktop development is required.

Modern Cross-Platform Development About This Book Build modern, cross-platform applications with .NET Core Get up to speed with C#, and up to date with all the latest features of C# 7 Start creating professional web applications with ASP.NET Core Who This Book Is For This book is targeted towards readers who have some prior programming experience or have a science, technology, engineering, or mathematics (STEM) background, and want to gain a solid foundation with C# and to be introduced to the types of applications they could build and will work cross-platform on Windows, Linux, and macOS. What You Will Learn Build cross-platform applications using C# 7 and .NET Core Explore ASP.NET Core and learn how to create professional web applications Improve your application's performance using multitasking Use Entity Framework Core and find out how to build code-first databases Master object-oriented programming with C# to increase code reuse and efficiency Familiarize yourself with cross-device app development using the Universal Windows Platform and XAML Query and manipulate data using LINQ Protect your data by using encryption and hashing In Detail If you want to build powerful cross-platform applications with C# 7 and .NET Core, then this book is for you. First, we'll run you through the basics of C#, as well as object-oriented programming, before taking a quick tour through the latest features of C# 7 such as tuples, pattern matching, out variables, and so on. After quickly taking you through C# and how .NET works, we'll dive into the .NET Standard 1.6 class libraries, covering topics such as performance, monitoring, debugging, serialization and encryption. The final section will demonstrate the major types of application that you can build and deploy cross-device and cross-platform. In this section, we'll cover Universal Windows Platform (UWP) apps, web applications, mobile apps, and web services. Lastly, we'll look at how you can package and deploy your applications so that they can be hosted on all of today's most popular platforms, including Linux and Docker. By the end of the book, you'll be armed with all the knowledge you need to build modern, cross-platform applications using C# and .NET Core. Style and approach This book takes a step-by-step approach and is filled with exciting projects and fascinating theory. It uses three high-impact sections to equip you with all the tools you'll need to build modern, cross-platform applications using C# and .NET Core.

Summary Cross-Platform Desktop Applications guides you step-by-step through creating Node.js desktop applications with NW.js and Electron from GitHub. Foreword by Cheng Zhao, creator of Electron. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Desktop application development has traditionally required high-level programming languages and specialized frameworks. With Electron and NW.js, you can apply your existing web dev skills to create desktop applications using only HTML, CSS, and JavaScript. And those applications will work across Windows, Mac, and Linux, radically reducing development and training time. About the Book Cross-Platform Desktop Applications guides you step by step through the development of desktop applications using Electron and NW.js. This example-filled guide shows you how to create your own file explorer, and then steps through some of the APIs provided by the frameworks to work with the camera, access the clipboard, make a game with keyboard controls, and build a Twitter desktop notification tool. You'll then learn how to test your applications, and debug and package them as binaries for various OSs. What's Inside Create a selfie app with the desktop camera Learn how to test Electron apps with Devtron Learn how to use Node.js with your application About the Reader Written for developers familiar with HTML, CSS, and JavaScript. About the Author Paul Jensen works at Starcount and lives in London, UK. Table of Contents PART 1 - WELCOME TO NODE.JS DESKTOP APPLICATION DEVELOPMENT Introducing Electron and NW.js Laying the foundation for your first desktop application Building your first desktop application Shipping your first desktop application PART 2 - DIVING DEEPER Using Node.js within NW.js and Electron Exploring NW.js and Electron's internals PART 3 - MASTERING NODE.JS DESKTOP APPLICATION DEVELOPMENT Controlling how your desktop app is displayed Creating tray applications Creating application and context menus Dragging and dropping files and crafting the UI Using a webcam in your application Storing app data Copying and pasting contents from the clipboard Binding on keyboard shortcuts Making desktop notifications PART 4 - GETTING READY TO RELEASE Testing desktop apps Improving app performance with debugging Packaging the application for the wider world

Building Cross-Platform Mobile Apps for Android, iOS, Web & Desktop

Creating Cross-Platform C# Applications with Uno Platform

Using Node, Electron, and NW.js

Build cross-platform applications and GUIs using Qt 5 and C++, 3rd Edition

End to End GUI Development with Qt5

PhoneGap Build

Discover how to leverage the Uno Platform to write single-codebase, cross-platform mobile, desktop, and web applications using C# and XAML Key FeaturesEnhance your Windows apps by running them on all operating systems and browsersUse tools and APIs you already know to remain productive as you target new platformsCreate realistic apps for various lines of business (LOBs) and consumer scenariosBook Description Developers are increasingly being asked to build native applications that run on multiple operating systems and in the browser. In the past, this would have meant learning new technologies and making multiple copies of an application. But the Uno Platform allows you to use tools, languages, and APIs you already know from building Windows apps to develop apps that can also run on other platforms. This book will help you to create customer-facing as well as line-of-business apps that can be used on the device, browser, or operating system of your choice. This practical guide enables developers to put their C# and XAML knowledge to work by writing cross-platform apps using the Uno Platform. Packed with tips and practical examples, this book will help you to build applications for common scenarios. You'll begin by learning about the Uno Platform through step-by-step explanations of essential concepts, before moving on to creating cross-platform apps for different lines of business. Throughout this book, you'll work with examples that will teach you how to combine your existing knowledge to manage common development environments and implement frequently needed functionality. By the end of this Uno development book, you will have learned how to write your own cross-platform apps with the Uno Platform and use additional tools and libraries to speed up your app development process. What you will learnUnderstand how and why Uno could be the right fit for your needsSet up your development environment for cross-platform app development with the Uno Platform and create your first Uno Platform appFind out how to create apps for different business scenariosDiscover how to combine technologies and controls to accelerate developmentGo beyond the basics and create 'world-ready' applicationsGain the confidence and experience to use Uno in your own projectsWho this book is for This book is for developers who are familiar with app development for Windows and want to use their existing skills to build cross-platform apps. Basic knowledge of C# and XAML is required to get started with this book. Anyone with basic experience in app development using WPF, UWP, or WinUI will be able to learn how to create cross-platform applications with the Uno Platform.

"This book is the best way for beginning developers to learn wxWidgets programming in C++. It is a must-have for programmers thinking of using wxWidgets and those already using it." —Mitch Kapor, founder of Lotus Software and the Open Source Applications Foundation Build advanced cross-platform applications that support native look-and-feel on Windows, Linux, Unix, Mac OS X, and even Pocket PC Master wxWidgets from start to finish—even if you've never built GUI applications before Leverage advanced wxWidgets capabilities: networking, multithreading, streaming, and more Foreword by Mitch Kapor, founder, Lotus Development and Open Source Application Foundation wxWidgets is an easy-to-use, open source C++ API for writing GUI applications that run on Windows, Linux, Unix, Mac OS X, and even Pocket PC—supporting each platform's native look and feel with virtually no additional coding. Now, its creator and two leading developers teach you all you need to know to write robust cross-platform software with wxWidgets. This book covers everything from dialog boxes to drag-and-drop, from networking to multithreading. It includes all the tools and code you need to get great results, fast. From AMD to AOL, Lockheed Martin to Xerox, world-class developers are using wxWidgets to save money, increase efficiency, and reach new markets. With this book, you can, too. wxWidgets quickstart: event/input handling, window layouts, drawing, printing, dialogs, and more Working with window classes, from simple to advanced Memory management, debugging, error checking, internationalization, and other advanced topics Includes extensive code samples for Windows, Linux (GTK+), and Mac OS X

Have you ever thought of creating beautiful, blazing-fast native apps for iOS and Android from a single codebase? Have you dreamt of taking your native apps to the web and desktop without it costing a fortune? If so, Pragmatic Flutter: Building Cross-Platform Mobile Apps for Android, iOS, Web & Desktop is the right place to start your journey to developing cross-platform apps. Google's Flutter is the brand-new way for developing beautiful, fluid, and blazing-fast cross-platform apps for Android, iOS, web, and desktops (macOS, Linux, Windows). Google's new Fuchsia OS user interface (UI) is implemented using Flutter as well. Learning to develop mobile apps with Flutter opens the door to multiple devices, form-factors, and platforms using a single codebase. You don't need any prior experience using Dart to follow along in this book; however, it's recommended that readers have some familiarity with writing code using one of the object-oriented programming languages. Your journey starts with learning to structure and organize the Flutter project to develop apps for multiple platforms. Next, you will explore the fundamentals of Flutter widgets. The journey continues with Flutter's layout widgets while also learning to build responsive layouts. You will get an understanding of organizing and applying themes and styles, handling user input, and gestures. Then you will move on to advanced concepts, such as fetching data over the network and integrating and consuming REST API in your app. You will get hands-on experience on design patterns, data modeling, routing, and navigation for multi-screen apps. When you are finished, you will have a solid foundational knowledge of Flutter that will help you move on to building great and successful mobile apps that can be deployed to Android, iOS, web, and desktop (macOS, Linux, Windows) platforms from a single codebase.

Build powerful cross-platform desktop applications with web technologies such as Node, NW.JS, Electron, and React About This Book Build different cross-platform HTML5 desktop applications right from planning, designing, and deployment to enhancement, testing, and delivery Forget the pain of cross-platform compatibility and build efficient apps that can be easily deployed on different platforms. Build simple to advanced HTML5 desktop apps, by integrating them with other popular frameworks and libraries such as Electron, Node.JS, Nw.js, React, Redux, and TypeScript Who This Book Is For This book has been written for developers interested in creating desktop applications with HTML5. The first part requires essential web-master skills (HTML, CSS, and JavaScript). The second demands minimal experience with React. And finally for the third it would be helpful to have a basic knowledge of React, Redux, and TypeScript. What You Will Learn Plan, design, and develop different cross-platform desktop apps Application architecture with React and local state Application architecture with React and Redux store Code design with TypeScript interfaces and specialized types CSS and component libraries such as Photonkit, Material UI, and React MDL HTML5 APIs such as desktop notifications, WebSockets, WebRTC, and others Desktop environment integration APIs of NW.js and Electron Package and distribute for NW.JS and Electron In Detail Building and maintaining cross-platform desktop applications with native languages isn't a trivial task. Since it's hard to simulate on a foreign platform, packaging and distribution can be quite platform-specific and testing cross-platform apps is pretty complicated.In such scenarios, web technologies such as HTML5 and JavaScript can be your lifesaver. HTML5 desktop applications can be distributed across different platforms (Window, MacOS, and Linux) without any modifications to the code. The book starts with a walk-through on building a simple file explorer from scratch powered by NW.JS. So you will practice the most exciting features of bleeding edge CSS and JavaScript. In addition you will learn to use the desktop environment integration API, source code protection, packaging, and auto-updating with NW.JS. As the second application you will build a chat-system example implemented with Electron and React. While developing the chat app, you will get Photonkit. Next, you will create a screen capturer with NW.JS, React, and Redux. Finally, you will examine an RSS-reader built with TypeScript, React, Redux, and Electron. Generic UI components will be reused from the React MDL library. By the end of the book, you will have built four desktop apps. You will have covered everything from planning, designing, and development to the enhancement, testing, and delivery of these apps. Style and approach Filled with real world examples, this book teaches you to build cross-platform desktop apps right from scratch using a step-by-step approach.

Hands-On Cross-Platform Desktop Apps with Electron 5.0

Build applications with C#, .NET Core, Entity Framework Core, ASP.NET Core, and ML.NET using Visual Studio Code, 4th Edition

Learn WinUI 3.0